

National Oceanic and Atmospheric Administration (NOAA)

Office of Ocean Exploration and Research

# Educational Resources 2012

[oceanexplorer.noaa.gov](http://oceanexplorer.noaa.gov)

The NOAA Office of Ocean Exploration and Research (OER) is committed to improving America's environmental literacy by bringing the excitement of ocean exploration and discovery to a wide variety of audiences. Educators are essential to this mission, and NOAA OER offers many opportunities for educators to learn about NOAA Ocean Exploration and how they can use NOAA science and technology associated with exploring the ocean in their classrooms. The offerings listed here are designed to introduce educators to ocean scientist explorers, their explorations, and exemplary tools and resources for engaging students of all ages in an underwater world that few have ever seen.

**NOAA Ship *Okeanos Explorer* Education Materials Collection** – A collection of education materials developed to personally involve educators and students with the voyages and discoveries of the *Okeanos Explorer*—America's first Federal ship dedicated to ocean exploration. The Collection includes standards-based lessons for grades 5-12 and many hands-on activities.

**Volume 1: *Why Do We Explore?*** guides student investigations into modern reasons for ocean exploration.

**Volume 2: *How Do We Explore?*** guides additional investigations into strategies and technologies used aboard the *Okeanos Explorer*.

[oceanexplorer.noaa.gov/okeanos/edu/welcome.html](http://oceanexplorer.noaa.gov/okeanos/edu/welcome.html)

**Lessons from the Deep: Exploring the Gulf of Mexico's Deep-Sea Ecosystems** – A selection of lessons from eleven OER-sponsored expeditions to explore deep-sea organisms and ecosystems in the Gulf of Mexico, plus new lessons and additional background on the 2010 Deepwater Horizon blowout event.

[oceanexplorer.noaa.gov/edu/guide/welcome.html](http://oceanexplorer.noaa.gov/edu/guide/welcome.html)

**Expedition Education Modules** – Modules designed to share the excitement of daily at-sea discoveries and the science behind NOAA's major ocean exploration expeditions. Each module contains an Expedition Purpose, Lessons, Multimedia Discovery Missions, OceanAGE Career Connections, and Other Resources and Links.

[oceanexplorer.noaa.gov/edu/modules/welcome.html](http://oceanexplorer.noaa.gov/edu/modules/welcome.html)

**Lesson Plans/RSS Feeds** – Hundreds of hands-on, inquiry- and standards-based lesson plans that bring entire classrooms "on board" for exploration and discovery; also available via RSS Feeds.

[oceanexplorer.noaa.gov/edu/lessonplans/lessonplans.html](http://oceanexplorer.noaa.gov/edu/lessonplans/lessonplans.html)

**Learning Ocean Science through Ocean Exploration** – An Earth Science-based curriculum for Grades 6-12 that takes lesson plans developed for NOAA ocean explorations and presents them in a comprehensive scope and sequence, integrating the Ocean Explorer Web site.

[oceanexplorer.noaa.gov/edu/curriculum/welcome.html](http://oceanexplorer.noaa.gov/edu/curriculum/welcome.html)

**Professional Development** – Onsite and online professional development to provide educators with opportunities to engage in learning about ocean exploration.

[oceanexplorer.noaa.gov/edu/prodev.html](http://oceanexplorer.noaa.gov/edu/prodev.html)

**OceanAGE Careers** – From underwater pilots to ocean explorers, these marine mentors provide students with first-hand knowledge of exciting careers through video interviews and career profiles.

[oceanexplorer.noaa.gov/edu/oceanage/welcome.html](http://oceanexplorer.noaa.gov/edu/oceanage/welcome.html)

**Multimedia Discovery Missions** – A series of interactive multimedia presentations and learning activities that address a wide range of ocean topics.

[oceanexplorer.noaa.gov/edu/learning/welcome.html](http://oceanexplorer.noaa.gov/edu/learning/welcome.html)

**Ocean Explorer Video Playlist** – A collection of some of Ocean Explorer's best expedition video content. Access videos via the Ocean Explorer Web site or share original videos via the Ocean Explorer YouTube Channel.

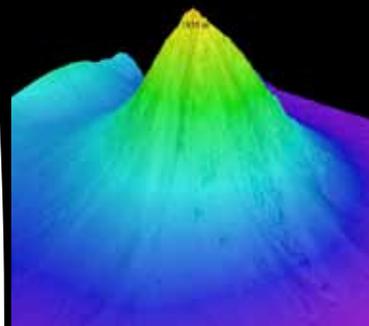
[http://oceanexplorer.noaa.gov/explorations/rss/youtube\\_playlist.html](http://oceanexplorer.noaa.gov/explorations/rss/youtube_playlist.html)

**Ocean Explorer Education Listserv** – An educator listserv providing dates and locations of onsite and online professional development offerings and notifications of upcoming NOAA ocean exploration expeditions and associated lesson plans.

[oceanexplorer.noaa.gov/backmatter/feedback.html#educators](http://oceanexplorer.noaa.gov/backmatter/feedback.html#educators)

**Ocean Challenge Puzzle** – Team up with players around the globe or in your classroom to solve the puzzle.

[www8.nos.noaa.gov/oequizx/welcome.html](http://www8.nos.noaa.gov/oequizx/welcome.html)



Top: The Kawio Barat (West Kawio) Seamount. The underwater volcano rises approximately 3,800 meters from the seafloor.

Middle: A benthopelagic sea cucumber swimming approximately 3,200 meters deep.

Bottom: Video technology plays a big role in ocean exploration.

All Images courtesy of NOAA *Okeanos Explorer* Program, INDEX-SATAL 2010 Expedition.

